



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,654	06/27/2001	Takashi Maruko	Q65201	5513

7590 08/15/2003
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

DUONG, THANH P

ART UNIT	PAPER NUMBER
----------	--------------

3711

DATE MAILED: 08/15/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,654

Applicant(s)

MARUKO ET AL.

Examiner

Tom P Duong

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

In view of the appeal brief filed on 5/19/03, PROSECUTION IS HEREBY REOPENED. The final rejection dated on 11/5/02 is withdrawn and a new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shimosaka et al. (5,816,937).

Art Unit: 3711

Regarding claims 1 and 2, Shimosaka discloses a multi-layer golf ball comprising of a solid core (1), an intermediate layer (4) with thickness G1 of 1.7-2.5 mm (Col. 3, lines 13-15) and Shore D hardness of 61-66 (Col. 3, lines 27-31) and an outermost layer 5 with thickness G2 of 0.02-1.1mm (Col. 3, lines 39-43) and Shore D hardness of less than 55, preferably 34-52 (Col. 2, lines 37-39). Shimosaka does not disclose the optimized formula: $[G_1/(G_1 + G_2)] \times 100 \Rightarrow 45\%$; however, selecting a given G1 value of 2.0 mm and G2 value of 0.5 mm from the above range and substituting these values into the above formula will yield 80%, which is greater than or equal to 45%. Regarding claim 3, Shimosaka discloses core distortion or deflection of 3.5-4.5 mm under an applied load of 100Kg. (Col. 4, lines 46-50). Regarding claim 5, Shimosaka discloses the cover material is made of polyurethane (Col. 3, lines 40-44).

2. Claims 1-2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sullivan et al. (5,803,831).

Regarding claims 1 and 2, Sullivan discloses a multi-layer golf ball comprising of a solid core (10), an inner cover layer (14), constitutes an intermediate layer, with thickness G1 of 0.01-0.1 inch (0.254 - 2.54 mm), (Col. 6, lines 57-60) and Shore D hardness of 60 or more (Col. 6, lines 65-67) and an outer cover layer (16) with thickness G2 of 0.01-0.1 inch (0.254 - 2.54 mm), (Col. 15, lines 30-34) and Shore D hardness of 55 or less, preferably 50 or less (Col. 15, lines 37-39). Sullivan does not disclose the optimized formula: $[G_1/(G_1 + G_2)] \times 100 \Rightarrow 45\%$; however, selecting a given G1 value of 2.0 mm

and G2 value of 0.5 mm from the above range and substituting these values into the above formula will yield 80%, which is greater than or equal to 45%.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references applied in claim 1 above, in view of Ichikawa et al. (5,872,185). Shimosaka does not disclose multi-piece solid golf ball of claim 1 wherein said cover is formed of a cover material having a melt index of at least 3.0 dg/min at 190° C. Ichikawa teaches a the resin blend must have a melt index of 3 dg/min (Col. 4, lines 24-30) at 190° to ensure molding of the golf balls. Thus, it would have been obvious in view of Ichikawa to one having ordinary skill in the art to control the melt index of at least 3.0 dg/min as taught by Ichikawa in fabricating the golf ball of Shimosaka in order to ensure proper molding. In addition, Official Notice is taken that it is conventional during the molding process to control the melt-flow index at least 1.0 or greater to aid in molding and polymer processing, and it would have been obvious to do so here to ensure proper molding.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P Duong whose telephone number is (703) 305-4559. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell can be reached on (703) 308-2126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 873-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

Tom Duong
August 1, 2003


DERRIS H. BANKS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700